

SAGA-Pilot

Milestone 1 Demo - Oct. 31, 2013

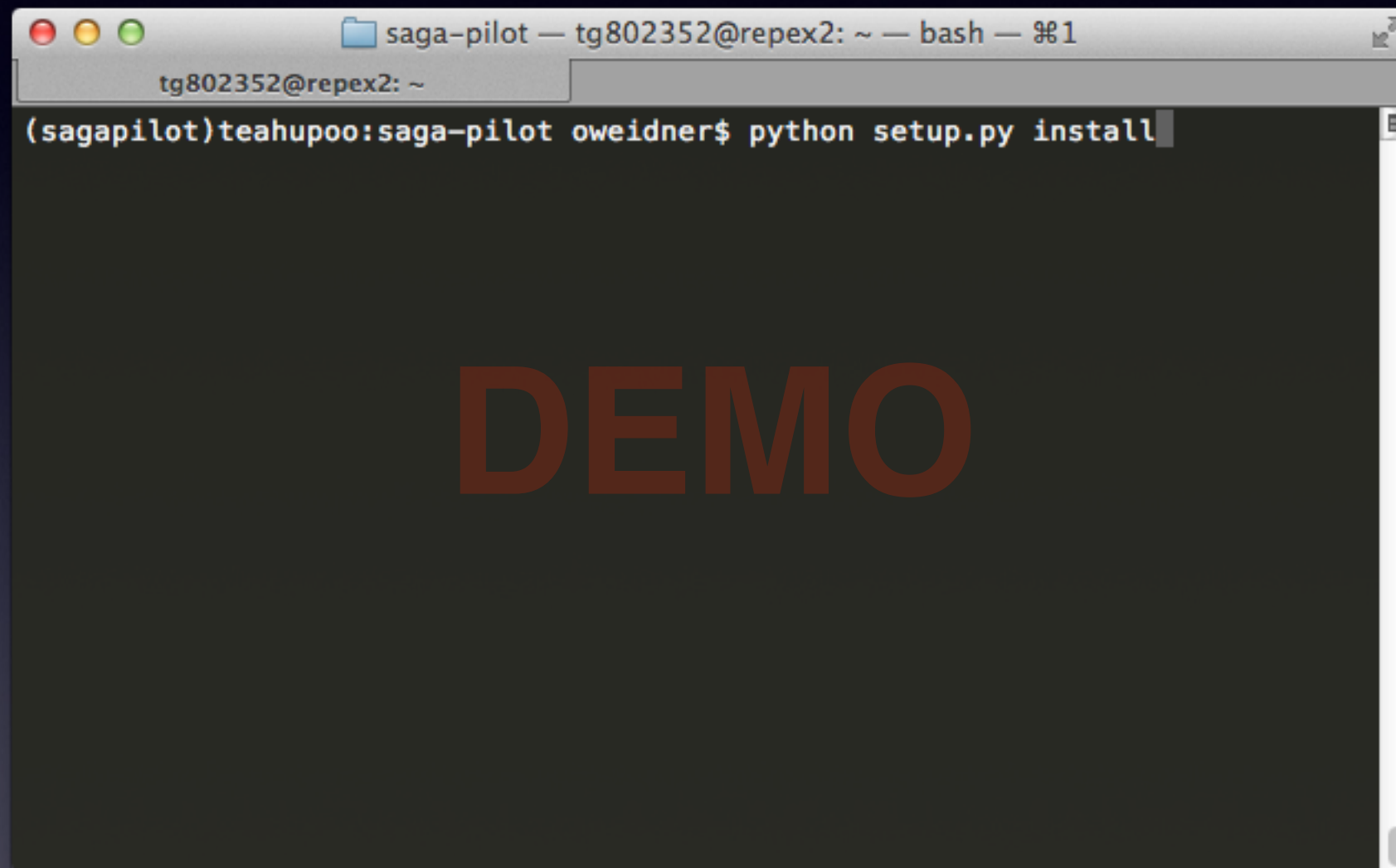
Resources

- Github repository: <https://github.com/saga-project/saga-pilot>
- Wiki: <https://github.com/saga-project/saga-pilot/wiki>

Objectives

1. *“A local easy_install results in a ‘functional’ installation.”*
2. *“UM, Pilot and CU representations can be created in the DB from API calls.”*

Installation / Testing



A terminal window titled "saga-pilot — tg802352@repex2: ~ — bash — %1" with a tab labeled "tg802352@repex2: ~". The terminal shows the command `(sagapilot)teahupoo:saga-pilot oweidner$ python setup.py install` being entered. A large, semi-transparent "DEMO" watermark is overlaid on the terminal content.

```
(sagapilot)teahupoo:saga-pilot oweidner$ python setup.py install
```


Database Integration

- Demo script: https://github.com/saga-project/saga-pilot/blob/master/examples/milestones/demo_milestone_01.py

Key Concepts

- Sessions are the 'root' objects. Have unique IDs:

```
session = sinon.Session(database_url=DBURL)
SID = session.sid #e.g., 43a85d39-c266-4386-...
```

- PMs and UMs are tied to a session:

```
pm = sinon.PilotManager(session=session)
```

- PMs and UMs are known to session:

```
session.list_pilot_managers()
session.list_unit_managers()
```

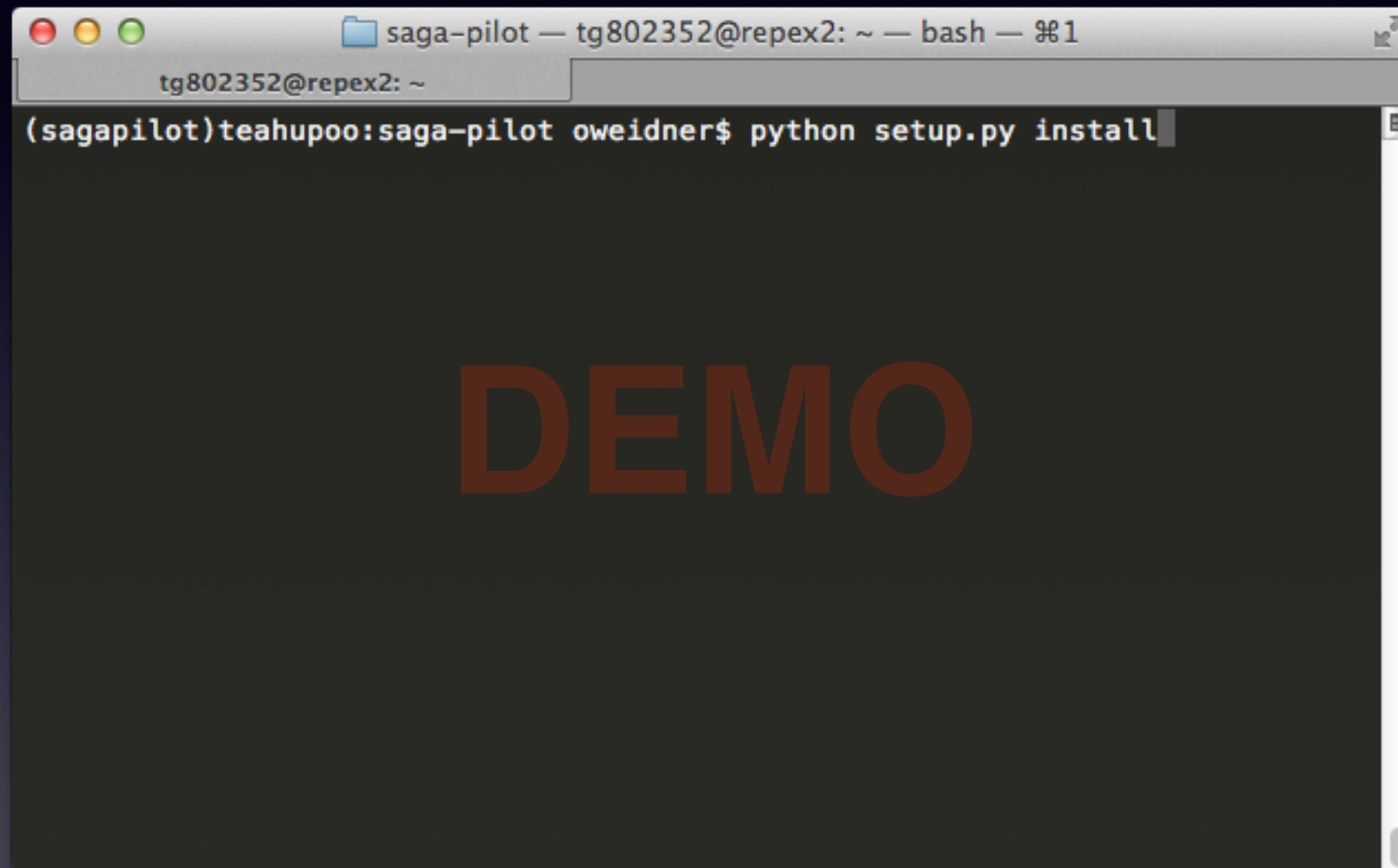
- Sessions allow reconnect:

```
session = sinon.Session(database_url=DBURL, session_id="43a85d39...")
```

Database Mapping

- Sessions are MongoDB collections:
 - `sinon.<sid>`: Holds some metadata.
 - `sinon.<sid>.w`: Collection holding work units.
 - `sinon.<sid>.wm`: Collection holding unit managers.
 - `sinon.<sid>.p`: Collection holding pilots.
 - `sinon.<sid>.pm`: Collection holding pilot managers.

Database Integration



A terminal window with a title bar that reads "saga-pilot — tg802352@repex2: ~ — bash — %1". The terminal content shows the command `(sagapilot)teahupoo:saga-pilot oweidner$ python setup.py install` being entered. A large, semi-transparent "DEMO" watermark is centered over the terminal area.

```
(sagapilot)teahupoo:saga-pilot oweidner$ python setup.py install
```


Accomplishments

- Working Python installer.
- Working unit tests with growing number of API-driven test cases.
- Database backend mapping and integration mostly complete.
- Re-connection implemented and tested extensively.

Next Two Weeks

- Finalize API calls / DB mapping.
- Document API calls, generate and improve documentation.
- Implement error handling and write extensive set of unit-tests for the 'worst cases'.
- MS1: "Submit 1 pilot to India, run 10 CUs"